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Factors Affecting Knowledge-based Decision Support Systems in Multinational Corporations

*21ST Conference of the International Federation of Operational Research Societies (IFORS),
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Authors:

Dr. Mahmoud Abdelrahman

Information Management , Newcastle Business School, Northumbria University

Dr. K. Nadia Papamichail

Alliance Manchester Business School, University of Manchester

Abstract:

The main aim of this study is to examine the impact of using Knowledge Management Systems (KMSs) on Knowledge Sharing (KS) to support decision-making processes (DMP) in Multinational Corporations (MNCs). This aim was achieved through conducting and analysing a literature review, followed by exploratory research with thematic analysis of 42 semi-structured interviews with participants from Europe & Middle-East who are working in MNCs to identify the factors affecting KS. A set of strong overarching themes were identified in a conceptual framework comprising four core dimensions. In the first dimension Knowledge Management Systems, three themes were identified: Technology Acceptance, Communication Tools, and KMSs Usage. In the second dimension Knowledge Sharing Practices, three themes were identified: Content, Willingness to Share, and External Factors (i.e: politics, corruption). In the third dimension Culture, the three themes were: National Culture, Organisational Culture, and Information Technology Culture. In the fourth dimension Decision-making Processes: Extent of Analysis and Speed of Decision-making were identified. The conceptual framework will make important contribution to the literature in Information Systems, Operational Research and Decision Support Systems which will help MNCs to identify new ways of leveraging and sharing knowledge to support the DMP. The findings give fruitful insights to managers inside MNCs to improve KS by using KMSs to support the DMP.

Keywords: Decision Support Systems; Knowledge Engineering and Management; Information Systems